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Canada

Respiratory Therapy Service
Guidelines

REPORT OF THE SUBCOMMITTEE ON INSTITUTIONAL PROGRAM GUIDELINES

GUIDELINES FOR ESTABLISHING STANDARDS

FOR UNITS/SERVICES AND PROGRAMS IN HOSPITALS

RESPIRATORY THERAPY SERVICE

Health Services Directorate
Health Services and Promotion Branch

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NOTE

The information contained in these guidelines is considered current as of the date of approval (May, 1987); however, since many aspects of health care and health technology are constantly changing, we welcome any suggested amendments. Information on new developments or related issues should be directed to:

The Secretariat
Subcommittee on Institutional
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Further copies of these guidelines, in English and in French, can be obtained from the above address.

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PREFACE

Technological advancement and changes in the delivery of health care services have led to the need for guidelines to assist in planning and implementing institutional programs and services. The guidelines[1] that follow represent one of a series of publications produced under the direction of the Subcommittee on Institutional Program Guidelines. They provide a consistent definition of requirements for a number of special care units, services and programs in health institutions.

In general, guidelines are based on information, knowledge, experience, research and expert opinion from health professionals and organizations throughout Canada. Additional material is often obtained from national and international health organizations and from other experts knowledgeable in the subject matter. This way many Canadians from across the country can contribute to the guidelines and a consensus on the suggested approach can beachieved.

Background

Under the direction of the Federal/Provincial Advisory Committee on Institutional and Medical Services, the guidelines program has been in operation since 1972. A standing subcommittee of the Advisory Committee, the Subcommittee on Institutional Program Guidelines, composed of federal and provincial government and professional representatives, coordinates the development of the guidelines commissioned by the Advisory Committee.

The guidelines are produced by expert working groups of health professionals, some of whom are government representatives. The final draft is reviewed and recommended by the Subcommittee for approval by the Advisory Committee.

Purpose

The purpose of the guidelines is to provide a comprehensive definition of requirements for services in health institutions. While a consensus of expert knowledge and experience is reflected in the guidelines, such guidelines should not be regarded as rigid standards. Provincial health authorities may modify the application of guidelines to meet their needs.

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1 A complete list of Institutional Program Guidelines appears in Appendix II.

Where development of a service is being contemplated, we believe the guidelines will be of help in determining the need for such a service either locally or regionally, or in some cases provincially or interprovincially.

Established services may take advantage of the guidelines in screening deficiencies and solving problems without the need to develop new services. Where a service already exists the guidelines will help:

- to identify problems related to administration, personnel, equipment and facilities;

- to determine necessary remedial action;

- to set priorities for corrective measures on the basis of clinical need, funding and the degree to which the service is deficient.

Future

The dramatic increase in the number of intensive and special care services in health institutions has given rise to the need for additional facilities, specialized equipment and highly trained personnel. At the same time, new approaches to patient care have evolved in a manner that emphasizes the need for a continuum of care in which admission to an institution is only one aspect of total care. Therefore, linkages along the health care continuum, ranging from illness prevention to chronic care, must be identified. As new treatments and procedures are put into practice, there will be a continuing need for guidelines to assist those involved in the planning and operation of institutional services.

Revisions

Due to the rapidly changing nature of health care delivery, guidelines will need updating and revision. The Subcommittee on Institutional Program Guidelines plans and oversees these revisions.

Acknowledgements

The Subcommittee acknowledges with sincere appreciation, the immense amount of work undertaken and time given by practising health professionals in Canada, in providing detailed written information and guidance in the preparation of these guidelines. In addition, we wish to thank the many others who, in any way contributed advice and information to this endeavour.

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1986 GUIDELINES REVISION

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RESPIRATORY THERAPY SERVICE

PREAMBLE

The following guidelines should provide a basis for reviewing existing services and planning new ones in respiratory therapy. Other provincial regulations and professional standards may influence regional patterns of practice.

Respiratory therapy had its birth in the mid 1950s as a result of the increasing sophistication of therapy for pulmonary and cardiac disorders. As presently practiced, the service is devoted to the scientific application of technology and therapy in order to assist the physician in the diagnosis, treatment and clinical investigation of patients with cardio-respiratory disorders.

The proper and effective utilization of these services in hospitals should improve the level of care provided to the patient with respiratory and cardiac disease. Respiratory therapists are the primary providers of the service.

GUIDELINES

GENERAL

Respiratory therapy may include therapeutic, diagnostic, technical, educational, administrative and research services.

Respiratory therapy should be developed in a hospital and should be based on the hospital's needs as defined by its community role. Any hospital with an emergency unit or an intensive care unit, or where major surgery is performed requires respiratory therapy services. The size, specialty interest, special care units and the severity of the illnesses of its patients will determine the requirements for personnel and other resources.

Respiratory Therapy Services

Respiratory therapy has been historically outlined in broad terms, but is continually being redefined as trends in patient care and treatment are updated. Although regional variations in the clinical involvement of the respiratory therapist are evident, there are nevertheless functions and objectives set out for him so that he may take part in the total health care team. It is, however, important to reiterate that respiratory therapy departments should demonstrate a certain degree of flexibility to allow for future expansion of services.

The respiratory therapy services in any hospital may include:

Therapeutic Services

- aerosol and humidity therapy;
- mechanical ventilatory support;
- therapeutic gas administration (including hyperbaric chamber);
- airway management;
- cardio-pulmonary resuscitation and support;
- involvement with the transport of the high-risk patient; participation in out-patient and home care program for chronic - respiratory patients;
- respiratory rehabilitation;
- anaesthesia support;
- organ donor support;
- specifically designated medical acts.

Diagnostic Services

- blood gas sampling and analysis;
- pulmonary function testing;
- cardio-pulmonary monitoring;
- other respiratory measurements;
- specifically designated medical acts.

Technical Services

- cleaning and sterilization of respiratory and anaesthesia equipment;
- planned maintenance and repair of related respiratory - equipment including anaesthesia equipment;
- evaluation of new respiratory and anaesthesia equipment;
- routine monitoring of equipment in service;
- control of the medical gas supply and its use;
- environmental pollution monitoring.

Educational Services

- education and orientation of departmental personnel and respiratory therapy students;
- education directed to other hospital personnel, patients and their families and community groups.

Administrative Services

Research Services

Consultative Services

- consultative services to industry, government and professional associations.

1. BASIS OF NEED FOR RESPIRATORY THERAPY SERVICES

The need for respiratory therapy services is related to the hospital's needs as defined by its role in the community.

Small hospitals should be assisted on a regional basis by medical and technological staff from larger hospitals or by organizing a cooperative resource of qualified personnel from several hospitals. When the scope of services offered does not warrant the designation of specific staff, the hospital should, nonetheless, have appropriately qualified personnel. A shared service, with pooling of travelling teams, might be considered.

2. ADMINISTRATIVE POLICY, PROCEDURES AND CONTROL[2]

2.1 Medical Direction

Due to the intensive clinical nature of respiratory therapy services, it is mandatory that clear medical direction be provided. The physicians providing this direction must be adequately versed in respiratory care procedures and techniques.

2.2 Administrative Direction

The chief therapist should be responsible for the administration of the unit.

2.3 Policies and Procedures

The policies and procedures governing the services provided should be developed by the chief therapist.

They should be approved by the Medical Advisory Committee and the hospital administration. Within these policies, there should be:

- a statement requiring that respiratory therapy clinical services should be provided only in accordance with the order of a physician, although this order may be based on standing procedures;
- an outline of the arrangements for maintaining 24-hour coverage;
- clinical and administrative lines of authority for the respiratory therapist;

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2 See also Appendix I page 10.

- policies and procedures for the establishment and maintenance of appropriate patient records. (These records should be made part of the comprehensive patient record. The information in a record should be compiled or abstracted so that statistical information on the work of the unit and its effectiveness can be measured);

- clear direction provided to respiratory therapy staff as regards the scope and limitations of their functions and responsibilities for patient care.

Established policies and procedures shall govern unit staff in the performance of their duties. These should be developed, reviewed and revised on a regular basis with members of the medical staff, administration and other professional disciplines, as appropriate. The policies and procedures shall at least cover the following salient points:

- the role and relationships of all members of the service's medical, technological and other staff;

- standing operating procedures for effective and safe use of therapeutic equipment and accessories;

- standing operating procedures in the event of contraindications to therapy and drug interactions. There should be consultations with other appropriate professionals on policies and procedures for the administration of drugs.

- the procurement, handling, storage and dispensing of therapeutic gases;

- standards of pertinent safety practices including the control of electrical, flammable explosive and mechanical hazards;

- infection control standards so as to minimize contamination and cross infection.

3. STAFF ESTABLISHMENT AND COVERAGE

3.1 Medical Advisor

There should be a designated medical advisor(s) for the service.

3.2 Staffing Requirements

The Canadian Workload Measurement System for Respiratory Therapy/-Pulmonary Function which provides a structured basis by which to record the activities of a respiratory therapy service in standarized units of therapist time and along with other indices, should be utilized to measure workload and productivity. Information gathered from this system should be used to assist in determining staffing needs.

3.3 Other Staff

Allied Health Staff

Staff other than the registered respiratory therapist may be employed to perform specific tasks for which they are qualified.

Aides

Aides may be trained to carry out general duties but shall not be permitted to administer any treatment to patients. These aides generally receive on-the-job training.

Clerical Staff

Clerical staff should be provided according to the size and workload of the service.

4. STAFF TRAINING AND QUALIFICATIONS

4.1 Initial

Medical Staff

The medical advisor(s) should hold certification from the Royal College of Physicians and Surgeons of Canada, or its equivalent, and be thoroughly conversant with the principles of respiratory care and technology.

Respiratory Therapist

A respiratory therapist is a person qualified to practice respiratory therapy, by meeting the requirements of the Canadian Society of Respiratory Therapists or, in the Province of Quebec, is entered on the role of the "Corporation professionnelle des inhalothérapeutes du Québec", or other provincial regulations where these exist.

Other

The chief respiratory therapist should have appropriate administrative skills and training.

Specialization of therapists in designated areas such as intensive care (adult or newborn), pulmonary function laboratory or anaesthesia support should be encouraged. All respiratory therapists should be trained in organ donor identification and support. These therapists should be appropriately trained.

4.2 Continuing Education

Medical Staff

The medical advisor(s) should participate in educational programs to enable them to keep abreast of new knowledge and techniques in the area of respiratory care and participate in educational programs in the department of respiratory therapy.

Respiratory Therapist and Other Unit Staff

The respiratory therapists and other staff should be provided with education programs to include orientation, on-the-job training, in service and continuing education, with a particular emphasis on current policies and procedures.

Professional staff should be encouraged and supported to attend meetings and seminars at the local, national and international levels.

5. SPECIFIC SUPPORTING DEPARTMENTS AND SERVICES

Supportive services should include biomedical engineering, central storage and supply, infection control, nursing, pharmacy, physiotherapy and other allied health services as may be required.

6. SPACE ALLOCATION, UTILIZATION AND SPECIAL DESIGN FEATURES[3]

The space requirements will depend on the scope and range of service provided by the service.

Facility planning, technical data, design and space allocation considerations should be based on established federal[3] and provincial standards.

Space should be provided for the following functions:

- administration and personnel facilities including space for the chief therapist, clerical support, medical advisor, conference room, classroom, reception, waiting room, and staff and patient washrooms;

- therapy and diagnostic areas as appropriate for the scope of practice;

- equipment maintenance, cleaning and sterilization;

- equipment storage;

- teaching (Appropriate space should be available for any instructional role fulfilled by the department).

The design and utilization of the space should provide flow patterns to prevent cross-infection and contamination.

7. EQUIPMENT

Equipment needs will vary with the size and scope of activities of a particular hospital. Minimal requirements for the hospital would be as follows:

- suitable equipment for cardio-pulmonary resuscitation;

- sufficient equipment for the delivery of humidified gases and aerosols;

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3 Opinions on design information may be obtained from other sources including: Space Programming Methodologies, Health Facilities Design Division, Health Services Directorate, Health and Welfare Canada, 1984.

- ventilators capable of maintaining a patient on continuous artificial ventilation;
- a variety of suction equipment;
- a blood gas analyser;
- basic pulmonary function equipment including a portable spirometer; and
- a variety of devices for repair, maintenance, calibration and sterilization of equipment.

As hospitals enlarge in size and scope, additional equipment appropriate to patient load will be required.

8. RELATIONSHIP WITH OTHER DEPARTMENTS AND SERVICES

The respiratory therapy service should be a separate service responsible to the hospital administration.

To ensure satisfactory interdepartmental relations, emphasis should be placed on concepts and ideals of operating as a member of a health care team.

When locating the service it is important to recognize its relationship with critical care areas and other related patient care areas.

ADMINISTRATIVE ORGANIZATION, POLICIES AND PROCEDURES

Guidelines for administrative organization, policies and procedures for institutional programs were formulated after a review of provincial, national and international information.

It is hoped that the following outline will serve as a guide for the development of more comprehensive and specific policies in order to ensure the most effective and efficient delivery of patient care in these units.

I. PHILOSOPHY, ROLES AND OBJECTIVES

- Philosophy, roles and objectives of the program
- Type of patients served
  - by diagnosis and/or severity of illness
  - restriction of service, if any
- Services provided

II. ORGANIZATION OF PROGRAM

- Governing board responsibility
- Relationship with administrator and medical staff
- Program management

(i) Specific responsibilities of staff

- Medical director
- Other medical staff
- Nursing staff
- Other staff

(ii) Committees

- Membership to be defined by discipline and number

- Terms of reference to be defined
- Provision for consultation with appropriate hospital and medical staff
- Schedules for formal and ad hoc meetings

III. POLICIES FOR OPERATION OF PROGRAM

1. General

- Admission authority (Identification of individual(s) who have authority to admit)
- Admission priorities by:
  - diagnostic category
  - clinical condition
- Admission orders
- Medical orders
- Emergency admission standing orders
- Discharge policies and planning
- Length of stay by diagnosis
- Infection control and isolation
- Patient records, reports and charting
- Handling of emergency situations including cardio-pulmonary resuscitation
- Emergency delegation of responsibility to medical, nursing and/or other staff
- Research/clinical investigation
- Palliative care, determination of death, authorization for autopsies, handling of bodies
- Referral, consultation (mandatory and other transfer, follow-up)

2. **Staff**

- Selection criteria: education, experience, interests
- Criteria for granting medical/clinical privileges
- Medical coverage/staff coverage of service
- Delineation of student and supervisor roles including responsibility, authority and accountability
- Position descriptions
- Orientation and continuing education
- Performance evaluation
- Volunteers

3. **Patient**

- Patient's rights
- Patient identification
- Family participation
- Confidentiality
- Patient/family education
- Patient valuables, assets and belongings
- Consent for treatment
- Visiting privileges

4. **Safety**

- Safety and accident prevention
- Reporting of accidents and incidents
- Equipment maintenance and safety and medical alert bulletins
- Fire and disaster plan

- Use of restraints

5. **Quality Assurance**

- Practice standards
- Continuing evaluation of effectiveness of service
- Patient status assessment on admission and discharge
- Incident reports
- Patient care review
- Infection control
- Audits: medical and nursing care, concurrent and retrospective
- Peer review
- Morbidity/mortality review
- Employee performance appraisal
- Product and equipment use and evaluation

IV. PROCEDURES

- Elective procedures
- Emergency alert system procedures
- Medical record and statistical procedures
- Policy and procedure manuals

LIST OF GUIDELINES FOR INSTITUTIONAL PROGRAMS

The following guidelines have been prepared by the federal-provincial Subcommittee on Institutional Program Guidelines. These guidelines were requested by the Federal-Provincial Advisory Committee on Institutional and Medical Care Services. Some of the guidelines are updated versions of guidelines previously published by the Subcommittee.

Addiction Services in Hospitals
Adult Long-Term Institutional Care
Adult Psychiatric Services Provided by General Hospitals
Breast Imaging Services: Mammography
Burn Unit
Cardiovascular Services in Hospitals
Child and Adolescent Psychiatric Services Provided by General Hospitals
Child and Adolescent Services in General Hospitals
Child and Youth Long-Term Services
Computed Tomography
Day Surgery Unit
Dental Care Units in Hospitals
Diabetic Day Care Unit
Diagnostic Imaging Services and Systems: An Overview
Diagnostic Ultrasound Facilities in Hospitals
Emergency Services in Hospitals
End-Stage Renal Disease Program
Geriatric Day Hospitals
Geriatric Unit in a Hospital
Hospital Day Medicine
Intensive Care Unit
Magnetic Resonance Imaging
Nuclear Medicine in Hospitals
Organ and Tissue Donation Services in Hospitals
Palliative Care Services in Hospitals
Patient Hostel Unit
Perinatal Intensive Care Units in a Perinatal Care Network
Pre-Hospital Emergency Services
Pulmonary Function Laboratories
Rehabilitation Medicine Program
Respiratory Therapy Service
Reuse of Disposables: An Information Report
Spinal Cord Injury Program
Stroke Program
Vital Organ Transplant Centres